

**REMARKS****Claim Rejections – 35 USC §103**

The Examiner rejected claims 1, 2 and 7 under 35 U.S.C. §103(a) in light of Yoneda (US Patent 4,117,752) combined with Hughes (US Patent 5,081,406). The Examiner says Yoneda discloses the invention as claimed, except "Yoneda remains silent in respect to the contact detection system is adapted to distinguish contact between the cutter and the person from at least one other event generating a comparable amount of change in the at least one property based on the time during which the change in the at least one property occurs." (Office Action mailed 11/16/05, p. 3.) The examiner cited Hughes as teaching that limitation.

The examiner's rejection is traversed because Hughes fails to teach or suggest distinguishing contact based on the time rate of change of a signal property. To the contrary, Hughes explicitly says his system is based on amplitude changes. For example, Hughes says: "Since the RF signal source 12 directly feeds the RLC network 10, the output signal from this network is an amplitude modulated carrier signal which varies in amplitude in response to body capacitance-produced dynamic changes in the capacitance dynamically coupled to the antenna 16." (Hughes, column 4, lines 27-32.) Nowhere does Hughes teach or suggest measuring the time during which the amplitude changes, or even any reason to do so. Because Yoneda and Hughes fail to disclose this limitation, the combination cannot support an obviousness rejection.<sup>1</sup> See, e.g., 35 USC

---

<sup>1</sup> The examiner cited Table A in Hughes as disclosing the time rate of change of amplitudes. (Office Action mailed 11/16/05, p. 3.) That is incorrect. The table makes no reference to rates of change. It simply lists voltage amplitudes produced by various materials.

103(a) (question is whether "the subject matter *as a whole* would have been obvious"); Application of Royka, 490 F.2d 981, 985 (CCPA 1974) (claim not obvious because limitation missing from cited references); Application of Wilson, 424 F.2d 1382, 1385 (CCPA 1970) ("All words in a claim must be considered in judging the patentability of that claim against the prior art."); MPEP 2143.03 ("To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art.")

The obviousness rejection of claims 1, 2 and 7 based on Yoneda and Hughes is similar to the prior rejection based on Sorensen (US Patent 5,942,975). Sorenson also discloses a system that looks for changes in amplitude of a signal; but it does not look for the rate of change. Applicant explained this point to overcome the Sorenson rejection. The current rejection based on Yoneda and Hughes should be withdrawn for the same reasons the rejection based on Sorenson was withdrawn.

The rejection of claims 1, 2 and 7 also should be reversed because there is no suggestion to make the combination. The examiner proffered only the following suggestion to make the combination: "Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided Yoneda with a contact detection system capable of distinguishing between different work pieces and the human body, as taught by Hughes et al., to allow the saw to determine if the material contacting the blade is to be cut or not." (Office Action mailed 11/16/06, p. 4.) The examiner's suggestion, however, does not make sense because Yoneda already discloses a system that purportedly distinguishes contact with a person from contact with wood. Why would a person of ordinary skill in the art want to change Yoneda if

Yoneda already does what the examiner says is the reason to change? Applicant asserts that the examiner's suggestion is simply a rote invocation made to support the obviousness rejection. It does not amount to a suggestion or motivation found in the prior art to make the claimed combination because it fails to identify any specific understanding or scientific principle suggesting the combination. See In re Rouffet, 149 F.3d 1350, 1355, 47 USPQ2d 1453 (Fed. Cir. 1998); In re Dembiczak, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999) (citations omitted), *abrogated on other grounds* in In re Gartside, 203 F.3d 1305, 53 USPQ2d 1769 (Fed. Cir. 2000).

The Examiner also rejected claims 4 and 5 under 35 U.S.C. §103(a) in light of Yoneda combined with Hughes. Claims 4 and 5 depend from claim 1 and are not obvious for the same reasons claim 1 is not obvious. Claim 4 also says the "time during which the change in the at least one property occurs is less than one millisecond," and claim 5 says the "time during which the change in the at least one property occurs is less than one hundred microseconds." The examiner rejects these claims because Yoneda says its system stops a band blade "immediately," and "immediately" qualifies as one millisecond or 100 microseconds. (Final Office Action mailed 11/16/06, p. 3.) This rejection is traversed because Yoneda does not teach or suggest looking for a change in a signal property that happens within 1 millisecond or 100 microseconds. In fact, Yoneda does not even look for a rate of change at all. Stopping a band blade "immediately" is not the same as distinguishing contact based on a signal property that changes in 1 millisecond or 100 microseconds. Those are two different things. Additionally, Yoneda cannot stop a band blade within 1 millisecond or 100 microseconds because of the inertia of the blade, pulleys and motor, and therefore, the

word "immediately" used in that context cannot refer to 1 millisecond or 100 microseconds. For these reasons, the obviousness rejection of claims 4 and 5 should be reversed.

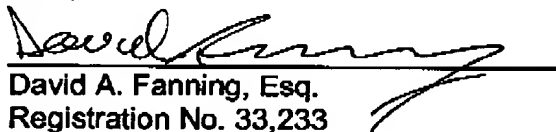
The Examiner also rejected claim 6 under 35 U.S.C. §103(a) in light of Yoneda and Hughes combined with Reddi (US Patent 6,366,099). Claim 6 depends from claim 1 and is not obvious for the same reasons claim 1 is not obvious. Claim 6 also says the event distinguished from contact between a person and the cutter is "contact between the cutter and green wood." Neither Yoneda nor Reddi teaches or suggests distinguishing contact between a cutter and a person from contact between the cutter and green wood, and neither reference says why that distinction is important.

**Allowable Subject Matter**

The examiner said claim 3 would be allowable if rewritten in independent form with all limitations of the base claim and any intervening claims. Applicant has made that amendment, so claim 3 should be allowed.

Respectfully submitted,

SD3, LLC



David A. Fanning, Esq.

Registration No. 33,233

Customer No. 27630

25977 S.W. Canyon Creek Road, Suite G

Wilsonville, Oregon 97070

Telephone: (503) 570-3200

Facsimile: (503) 570-3303

**CERTIFICATE OF TRANSMISSION/MAILING**

I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, or facsimile transmitted to the U.S. Patent and Trademark Office to number (571) 273-8300, on the date shown below.

Date: February 16, 2006  
David A. Fanning